

Appl. No. 10/088,432

Response dated July 8, 2004

Reply to Non-Final Office Action of March 9, 2004

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-12. (Canceled)

13. (Previously Presented) A process for restructuring keratin fibers comprising applying to keratin fibers

(a) at least one enzyme having transglutaminase activity; and

(b) at least one active substance having substrate activity for the enzyme.

14. (Previously Presented) The process of claim 13 wherein the enzyme having transglutaminase activity comprises a calcium-independent transglutaminase.

15. (Previously Presented) The process of claim 13 wherein the active substance having substrate activity comprises at least one protein or protein hydrolyzate, or combinations thereof.

16. (Previously Presented) The process of claim 13 wherein the active substance having substrate activity comprises at least one protein or protein hydrolyzate of elastin, collagen, keratin, silk, soya, almond, pea, alga, potato, or wheat, or combinations thereof.

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17. (Previously Presented) The process of claim 16 wherein the active substance comprises casein, soya protein or wheat protein, or combinations thereof.

18. (Previously Presented) The process of claim 13 wherein the active substance having substrate activity comprises a substance synthetically functionalized with an $\text{H}_2\text{N}-\text{R}$ group or an $\text{H}_2\text{N}-(\text{CO})-\text{R}'$ group, wherein R and R' represent an unbranched C_{1-8} alkylene group.

19. (Previously Presented) The process of claim 18 wherein the synthetically functionalized substance has at least one $\text{H}_2\text{N}-(\text{CH}_2)_4$ group.

20. (Previously Presented) The process of claim 18 wherein the synthetically functionalized substance has at least one $\text{H}_2\text{N}-(\text{CO})-\text{CH}_2-\text{CH}_2$ group.

21. (Previously Presented) The process of claim 13 wherein the enzyme having transglutaminase activity and the active substance having substrate activity are applied simultaneously to the keratin fibers.

22. (Previously Presented) The process of claim 13 wherein the enzyme having transglutaminase activity, and the active substance having substrate activity are applied successively in any order.

23. (Previously Presented) The process of claim 13 wherein the enzyme having transglutaminase activity is contacted

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with the keratin fibers for a contact time of 3 minutes to 120 minutes.

24. (Previously Presented) A process for setting keratin fibers comprising

- (a) applying to keratin fibers at least one enzyme having transglutaminase activity and at least one active substance having substrate activity for the enzyme; and
- (b) setting the keratin fibers.

25. (Previously Presented) The process of claim 24 wherein the active substance having substrate activity comprises at least one protein or protein hydrolyzate of elastin, collagen, keratin, silk, soya, almond, pea, alga, potato, or wheat, or combinations thereof.

26. (Previously Presented) The process of claim 25 wherein the active substance comprises casein, soya protein or wheat protein, or combinations thereof.

27. (Previously Presented) The process of claim 26 wherein the enzyme having transglutaminase activity comprises a calcium-independent transglutaminase.

28. (Previously Presented) A multi-part kit for restructuring keratin fibers comprising

- (a) a first composition comprising at least one enzyme having transglutaminase activity; and
- (b) a second composition having an active substance with substrate activity for the enzyme.

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29. (Previously Presented) The kit of claim 28 wherein the active substance having substrate activity comprises at least one protein or protein hydrolyzate of elastin, collagen, keratin, silk, soya, almond, pea, alga, potato, or wheat, or combinations thereof.

30. (Previously Presented) The kit of claim 29 wherein the active substance comprises casein, soya protein or wheat protein, or combinations thereof.

31. (Previously Presented) The kit of claim 30 wherein the enzyme having transglutaminase activity comprises a calcium-independent transglutaminase.